Amendments to the Specification:

On page 1, below the title and above "TECHNICAL FIELD", please insert the following new paragraph:

--This application is the United States national phase application of International Application PCT/JP2003/011881 filed September 18, 2003.—

On page 1, please replace the last full paragraph with the following amended paragraph:

(1) a method which utilizes the birefringence of a crystalline material, and accomplishes phase matching of the input and output wavelengths ~~before and after conversion~~ by propagating light at a specified angle; and

On page 2, please replace the first full paragraph with the following amended paragraph:

(2) a method called "quasi-phase matching" in which periodic polarization inversion regions are formed on the light propagation path, and the difference in the phases of the input and output wavelengths ~~before and after conversion~~ is eliminated in approximate terms.

On page 2, please replace the second full paragraph with the following amended paragraph:

Of these two methods, the latter quasi-phase matching would appear to possess numerous advantages in adaptation for practical use, e.g., the permissible width of the operating wavelength and angle of incidence is large, the phenomenon known as "walk-off" in which the input and output lights ~~before and after wavelength conversion~~ travel along different directions does not occur, and the like; accordingly, this method has been the focus of various expectations.

On page 2, please replace the last full paragraph with the following amended paragraph:

The formation of a polarization inversion region in a wavelength conversion element utilizing a quasi-phase matching technique can be realized (for example) by using a ferroelectric material such as lithium niobate as the substrate material, patterning an electrode in the region where it is desired to accomplish polarization inversion using a photolithographic technique, and applying a high ~~direct current~~ voltage to this electrode, so that

partial inversion of the crystal axes is accomplished by means of the electric field.

On page 3, please replace the second full paragraph with the following amended paragraph:

This wavelength conversion element using quartz as the substrate material shows a light resistance that is at least 100 times greater than that of an element using a ferroelectric material as the substrate. Furthermore, the lower-limit wavelength at which the element is transparent is around 150 nm, while the same wavelength is 350 ~~400~~ nm in the case of lithium niobate. Consequently, the following advantage is obtained: namely, light at wavelengths that conventionally could not be used, and in particular, even light at a wavelength of approximately 193 nm, which is comparable to that of an ArF excimer laser, can also be used.

On page 5, please replace the first full paragraph with the following amended paragraph:

However, in the case of a quasi-phase matching element using quartz, the following problem is encountered: namely, waveguides cannot be formed using

such a proton exchange process, so that the confinement of the light is impossible ~~insufficient~~; as a result, a high conversion efficiency cannot be obtained.

On page 13, please replace the second full paragraph with the following amended paragraph:

Next, using the resist as a mask, a CF4 + H2 type gas is used ~~implanted~~ in the surface of the quasi-phase matching element 1. As a result, when the surface of the substrate is etched, the portions covered by the resist remain so that a protruding part 8 is formed (Figure 3 (d)). Subsequently, the wavelength conversion element constituting one working configuration of the present invention is completed by removing the resist layer 5 (Figure 3 (e)).